



Installing the Client Adapter

This chapter provides instructions for installing the client adapter driver and the client utilities.

The following topics are covered in this chapter:

- [Determining the Windows CE Version, page 3-2](#)
- [Determining the Latest Driver and Client Utility Versions, page 3-2](#)
- [Installing the Driver and Client Utilities, page 3-3](#)
- [Installing the Driver and Client Utilities on Other Windows CE Devices, page 3-8](#)
- [Verifying Installation, page 3-8](#)

Determining the Windows CE Version

When you install the driver for your client adapter, you need to know which version of Windows CE your device is running because the Cisco Aironet drivers are specific to different versions of Windows CE. Follow the instructions below to determine the version of Windows CE that your device is using.

- If your Windows CE device is a Pocket PC (PPC) device, select **Start > Settings > the System tab > About**. The Windows CE version is displayed.
- If your Windows CE device is a Handheld PC (HPC) device, select **Start > Settings > Control Panel > System**; then select the **System** tab. The core system version indicates the version of Windows CE that the device is running (such as 2.11).

Determining the Latest Driver and Client Utility Versions

The driver and client utilities are provided on the Cisco Aironet Wireless LAN Client Adapters CD that shipped with the client adapter; however, a more recent version of both may be available from Cisco.com. Cisco recommends installing the most current versions of the driver and client utilities.

Follow the steps below to determine the most recent version of the driver and client utilities on your CD and Cisco.com.

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- Step 1** To determine the version of the driver and client utilities on the Cisco Aironet Wireless LAN Client Adapters CD, open the FileList.txt file on the CD's root directory. This file lists the version numbers for all of the software files provided on the CD.



Note If the FileList.txt file is not present on the root directory, your CD is obsolete, and more recent versions of the software are available on Cisco.com. Go to the [“Installing the Driver and Client Utilities”](#) section on page 3-3.

- Step 2** To determine the latest driver and client utility versions available on Cisco.com, follow the steps below:
- Use your computer's web browser to access the following URL:
<http://www.cisco.com/public/sw-center/sw-wireless.shtml>
 - Locate the section for client adapter drivers and utilities.
 - Click the link for Windows CE 2.11 or 3.0, depending on which version of Windows CE your device is running.
 - Look at the release numbers of the driver and client utilities in the description below the filename. These are the latest available versions on Cisco.com.
- Step 3** Go to the [“Installing the Driver and Client Utilities”](#) section on page 3-3. If the driver or client utility version on Cisco.com is greater than the version on the CD, follow the instructions for installing the driver and client utilities from Cisco.com.
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Installing the Driver and Client Utilities

The WinCE2.11-PCM-LMC-vx.xx.exe and WinCE3.0-PCM-LMC-vx.xx.exe files, which are used to install the driver and client utilities, consist of individual *.cab files. Each *.cab file contains the driver, client utility, and online help files for a specific Windows CE CPU/device combination. When the *.exe file is executed, all of the *.cab files are extracted, and the *.cab file specific to the attached Windows CE device is copied to the device.

Follow the steps below to install the driver and client utilities for your client adapter.

**Note**

This procedure is meant to be used the first time the driver and client utilities are installed on a Windows CE device. If Cisco Aironet client adapter software is already installed on your Windows CE device, follow the instructions in [Chapter 7](#) to first uninstall any existing software and then to upgrade to new software.

**Note**

The driver and client utilities must be installed before you insert a client adapter into a Windows CE device.

Step 1

Use a serial or USB cable to connect your Windows CE device to a laptop or PC running Microsoft ActiveSync. A message appears on the Windows CE device indicating that it is connecting to the host. After the Windows CE device is connected, the New Partnership window appears on the laptop or PC. This window asks if you want to set up a partnership.

**Note**

Cisco recommends that you install the latest version of ActiveSync.

Step 2

Perform one of the following:

- If you want to establish a partnership that allows you to synchronize files between the laptop or PC and the Windows CE device, select **Yes**, click **Next**, and follow the instructions on the screen to specify the files to be synchronized and to finish setting up the partnership.
- If you do not want to synchronize files and want to connect as a “guest,” select **No** and click **Next**. The screen indicates that you are connected as a guest.

Step 3

Perform one of the following:

- If you are installing the driver and client utilities from the Cisco Aironet Wireless LAN Client Adapters CD that shipped with the client adapter, follow the steps below:
 - a. Insert the CD into the laptop or PC’s CD-ROM drive.
 - b. Use Windows Explorer to access the WinCE directory.
 - c. Select the folder for your version of Windows CE (CE211 or CE300).
 - d. Go to [Step 4](#).
- If you are installing the driver and client utilities from Cisco.com, follow the steps below:
 - a. Use the laptop or PC’s web browser to access the following URL:
<http://www.cisco.com/public/sw-center/sw-wireless.shtml>
 - b. Locate the section for client adapter drivers and utilities.

- c. Click the link for Windows CE 2.11 or 3.0, depending on which version of Windows CE your device is running.
- d. Select the **WinCE2.11-PCM-LMC-vx.xx.exe** or **WinCE3.0-PCM-LMC-vx.xx.exe** file.
- e. Read and accept the terms and conditions of the Software License Agreement.
- f. Select the **WinCE2.11-PCM-LMC-vx.xx.exe** or **WinCE3.0-PCM-LMC-vx.xx.exe** file to download it.
- g. Save the file to a floppy disk or to the hard drive of your laptop or PC.
- h. Use Windows Explorer to locate the saved file.
- i. Go to [Step 4](#).

Step 4 Double-click the *.exe file for your version of Windows CE (**WinCE2.11-PCM-LMC-vx.xx.exe** or **WinCE3.0-PCM-LMC-vx.xx.exe**). The application creates an Install directory under the ActiveSync directory, extracts the .cab files contained in the *.exe file, and copies them to the Install directory.



Note All of the *.cab files for the supported Windows CE CPU/device combinations are contained in one of these two executable files. The “[System Requirements](#)” section on page 2-4 lists the Windows CE devices that are supported for use with 340 and 350 series client adapters. Check this list to ensure that a *.cab file is available for your device.

Step 5 Click **Next** to start the Windows CE Application Manager (CeAppMgr), which is installed with ActiveSync. CeAppMgr interrogates the Windows CE device to determine its processor type.



Note If a Windows CE device is not connected to the laptop or PC (as instructed in [Step 1](#)), click **Exit** to quit the setup program and connect a Windows CE device or click **Next** to continue the installation. If you select **Next**, a message appears indicating that the software will be downloaded the next time a mobile device is connected. Click **OK**. The next time a Windows CE device is connected to the laptop or PC via ActiveSync, CeAppMgr starts automatically, and you are prompted to install the software. If you select **Exit**, click **OK** to shut down CeAppMgr and start again beginning with [Step 1](#).

Step 6 When a dialog box appears asking if you want to install the client adapter using the default application installation directory, click **Yes**. The default directory is \Windows\Programs\Cisco on HPC devices and \Windows\Start Menu\Programs\Cisco on PPC devices.

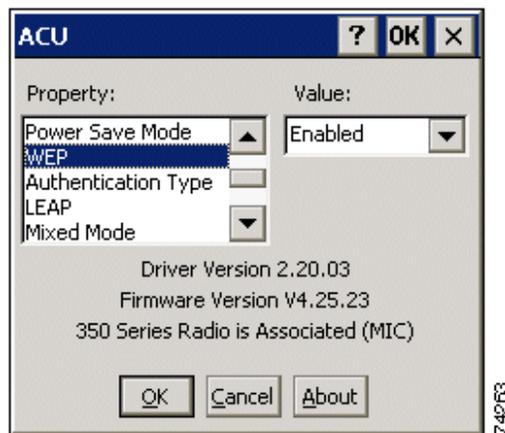


Note If you click **No** on an HPC device, CeAppMgr transfers the *.cab file to the Windows CE device and executes it. This process takes awhile and shows no evidence of activity. Eventually a screen appears on the Windows CE device that asks you where the application files should be installed.

A message and a progress bar appear indicating that the client adapter is being installed. CeAppMgr copies the processor-specific *.cab file to the Windows CE device. Then the driver and help files are copied to the \Windows directory, and the client utilities are installed in the \Windows\Programs\Cisco directory on HPC devices or the \Windows\Start Menu\Programs\Cisco directory on PPC devices. Shortcuts to the Aironet Client Utility (ACU) and the Client Encryption Manager (CEM) are automatically added to the desktop on HPC devices.

- Step 7** When the installation process is complete on the laptop or PC, a message appears asking you to check the screen of the Windows CE device to see if any additional steps are required to complete the installation. Click **OK** to terminate the installation process on the laptop or PC.
- Step 8** Complete any required steps on the Windows CE device.
- Step 9** Remove the CD, if installed.
- Step 10** Disconnect the Windows CE device.
- Step 11** Insert the client adapter (with the Cisco logo facing up) into the PC card slot of the Windows CE device. Refer to [Chapter 7](#) for specific instructions on inserting the client adapter.
- The Windows CE device should configure the client adapter, and the green LED on the adapter should blink. If this does not happen, remove the client adapter, reset the Windows CE device, and reinsert the client adapter.
- Step 12** The Cisco Wireless LAN Adapter Settings dialog box appears. (If the dialog box does not appear, select **Start, Settings, Control Panel, Network**, the **Adapters** tab, the Cisco Aironet wireless LAN adapter, and **Properties** on HPC devices or **Start, Settings, the Connections** tab, **Network**, and the Cisco Aironet wireless LAN adapter on PPC devices.)
- Perform one of the following:
- If your device is connected to a DHCP server, select **Obtain an IP address via DHCP** or **Use server-assigned IP address** and click **OK**.
 - If your device is not connected to a DHCP server, select **Specify an IP address** or **Use specific IP address** and follow the steps below:
 - a. Enter the IP address, subnet mask, and default gateway address you want to assign to your device. They can be obtained from your system administrator.
 - b. Select the **Name Servers** tab and enter the primary and secondary DNS and WINS you want to assign to your device. They can be obtained from your system administrator.
 - c. Click **OK**.
- Step 13** Double-click the **Cisco ACU icon** or select **Start > Programs > Cisco > Aironet Client Utility** to open ACU. The ACU screen appears (see [Figure 3-1](#)).

Figure 3-1 ACU Screen



Step 14 Select **SSID** under Property. Then enter your RF network's case-sensitive SSID in the Value box.

SSID	<p>The service set identifier (SSID) identifies the specific wireless network that you want to access.</p> <p>Range: Up to 32 characters (case sensitive)</p> <p></p> <p>Note If you leave this parameter blank, your client adapter can associate to any access point on the network that is configured to allow broadcast SSIDs (see the AP Radio Hardware page in the access point management system). If the access point with which the client adapter is to communicate is not configured to allow broadcast SSIDs, the value of this parameter must match the SSID of the access point. Otherwise, the client adapter cannot access the network.</p>
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Step 15 Select **Client Name** under Property. Then enter your Windows CE device's unique client name in the Value box.

Client Name	<p>A logical name for your Windows CE device. It allows an administrator to determine which devices are connected to the access point without having to memorize every MAC address. This name is included in the access point's list of connected devices.</p> <p>Range: Up to 16 characters</p> <p></p> <p>Note Each computer on the network should have a unique client name.</p>
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Step 16 Select **Data Rates** under Property. Make sure that **Auto** is selected in the list of options in the Value box.

Data Rates	<p>Specifies the rate at which you want your client adapter to transmit or receive packets to or from access points (in infrastructure mode) or other clients (in ad hoc mode).</p> <p>Auto is recommended for infrastructure mode; setting a specific data rate is recommended for ad hoc mode.</p> <p>Default: Auto</p>	
	Data Rate	Description
	Auto	Uses the 11-Mbps data rate when possible but drops to lower rates when necessary
	1 Mb Only	Offers the greatest range but the lowest throughput
	2 Mb Only	Offers less range but greater throughput than the 1 Mbps Only option
	5.5 Mb Only	Offers less range but greater throughput than the 2 Mbps Only option
	11 Mb Only	Offers the greatest throughput but the lowest range
	 <p>Note Your client adapter's data rate must be set to Auto or must match the data rate of the access point (in infrastructure mode) or the other clients (in ad hoc mode) with which it is to communicate. Otherwise, your client adapter may not be able to associate to them.</p>	

Step 17 Click **OK**. The driver and client utility installation is complete. The client adapter has been installed and configured for basic operation. Go to the [“Verifying Installation” section on page 3-8](#) to determine if the installation was successful. Then if you want to enable security features for the client adapter, go to [Chapter 4](#).



Note If you want to be able to use the client adapter on another Windows CE device, you can install the driver and client utilities on that device without having to complete all of the previous steps. Refer to the [“Installing the Driver and Client Utilities on Other Windows CE Devices”](#) section below for instructions.

Installing the Driver and Client Utilities on Other Windows CE Devices

After you have installed the driver and client utilities for your client adapter on a Windows CE device, you can prepare other Windows CE devices with the same operating system (2.11 or 3.0) to be used with your client adapter without having to repeat all of the steps provided in the previous section. You can follow an abbreviated procedure because the driver and client utility files for many different Windows CE CPU/device combinations were copied to the Cisco Aironet Wireless LAN Adapter directory on the laptop or PC when you executed WinCE2.11-PCM-LMC-vx.xx.exe or WinCE3.0-PCM-LMC-vx.xx.exe.



Note

After the WinCE2.11-PCM-LMC-vx.xx.exe or WinCE3.0-PCM-LMC-vx.xx.exe file has been executed once on the laptop or PC, this procedure can be used to install the driver and client utilities on Windows CE devices that are running the corresponding operating system (2.11 or 3.0).

Follow the steps below to install the driver and client utilities on other Windows CE devices using an abbreviated procedure.

Step 1 Make sure the Windows CE device is connected to a laptop or PC on which the WinCE2.11-PCM-LMC-vx.xx.exe or WinCE3.0-PCM-LMC-vx.xx.exe file was already executed.

Step 2 On the laptop or PC, open **Windows Explorer** and navigate to the C:\Program Files\Microsoft ActiveSync directory.



Note

This step assumes that the default install was used for ActiveSync.

Step 3 Double-click **CeAppMgr.exe**. After the laptop or PC retrieves data from the Windows CE device, the Add/Remove Programs screen appears on the laptop or PC.

On the Add/Remove Programs screen, empty checkboxes indicate the programs that are installed on the PC, and selected checkboxes indicate the programs that are installed on the Windows CE device.

Step 4 In the Add/Remove Programs screen, select the **Cisco Wireless LAN Adapter** checkbox and click **OK** to copy the client adapter's driver and client utility files from the laptop or PC to the Windows CE device.

Step 5 Go to [Step 6](#) of the “Installing the Driver and Client Utilities” section to complete the installation process.

Verifying Installation

To verify that you have properly installed the driver and client utilities and minimally configured your client adapter, check the client adapter's LEDs. If the installation was successful, the client adapter's green LED blinks.



Note

If your installation was unsuccessful or you experienced problems during or after driver installation, refer to [Chapter 8](#) for troubleshooting information.